ANNEX BB
AGRICULTURE RESOURCE MANAGEMENT

I. SITUATION AND ASSUMPTIONS

A. Food production is important to maintaining human life.

B. Food production could be interrupted by disease, natural, man made, or technological incidents or conventional or nuclear war.

C. Food production could be interrupted anywhere in the production cycle – planting, harvesting, transportation, or processing.

D. Maintenance of fertile seeds and breeding animals to maintain continual crop production, milk supply and meat processing is more important than maintaining minimum food requirements.

II. MISSION

The agriculture coordinator is to insure maintenance of the complete food production cycle.

III. DIRECTION AND CONTROL

A. The County Emergency Board (CEB) is responsible for ensuring that crop and livestock production, transportation and processing is maintained in the county.

B. The Kentucky Department of Agriculture is responsible for insuring that crop and livestock production, transportation and processing is maintained in the state.

C. The USDA is responsible for providing direction and advice to the State Emergency Board (SEB). This may include but not be limited to establishing rationing for fertilizer, seed, feed, breeding stock and equipment.

D. The CEB is responsible for carrying out policies and directions issued by the SEB and in surveying local farms for damage.

IV. CONCEPT OF OPERATIONS

A. The County and State Emergency Boards will be the organizations through which statewide agricultural policy will be developed and information communicated to the farmers.

B. The Kentucky Department of Agriculture will act as the channel for funneling all state input to the SEB and from the SEB to the CEB.

C. The chairman of the CEB will operate out of the county EOC, when requested by local officials.

D. When major parts of the county's croplands, crops or livestock are threatened or destroyed, the CEB will survey the county for potential or actual damage and forward their report to the SEB. The SEB will forward this information to the USDA and KyEM.

E. During a nationwide agricultural emergency, the Governor or the President may put into effect the provisions of Annex O, "Economic Stabilization and Resources Management".

F. Due to disease or contamination of crops or livestock, a quarantine or embargo may be imposed on all or part of the county. Help may be obtained from other state and local agencies to enforce this decree (See Appendix BB-4 to the KyEOP).

G. Confiscation of private crops and/ or pasture is not to be undertaken until all other avenues are tried.

H. Rationing, if imposed, will most probably be administered through Annex O, "Economic Stabilization and Resources Management". Rationing may include but not be limited to fertilizer, seed, breeding stock, insecticides, farm equipment, manpower, fuel and water.

I. Operational Readiness Phase.

1. Preparedness Phase.

a. Identify and inventory all agricultural resources.

b. Plan for the utilization of essential public health personnel, supplies, and equipment to provide health and environmental sanitation services. These Services would include vector control measures and communicable disease surveillance.

c. Coordinate agricultural plans with surrounding counties.

d. Develop an emergency response organization.

e. Develop Standard Operating Procedures (SOP) for rapid deployment of personnel to disaster areas.

f. Develop assignment tasks and functions for volunteer veterinarian

personnel.

g. Train and exercise staff.

2. Response Phase.

a. Increased Readiness Period.

1) Complete any procedures under Preparedness Phase not yet completed.

2) Review and update annex.

3) Alert personnel needed to carry out the tasks in the annex.

4) Carry out needed training.

5) Insure necessary supplies are available.

b. Emergency Operation Period.

1) Natural, Man-made, Technical and War Related Disaster.

a) Complete any procedures under Preparedness Phase or Increased Readiness Period not yet completed.

b) Provide needed services.

c) Coordinate all agricultural resources.

d) Implement surveillance and control measures for communicable diseases and sanitation in disaster area.

e) Provide for burial of dead animals.

3. Recovery Phase.

a. Revert to Response or Preparedness Phase upon direction of EOC.

b. Upon return to Preparedness Phase survey organization for cost of preparing for and conducting operation and critique operation for updating plans and SOP's.

4. Increased readiness Levels will be initiated by the County Judge/Executive based on information furnished by KyEM. The required actions are explained

in Annex D of this plan.

J. See Appendix BB-4 of the KyEOP for additional agricultural guidance and assistance.

V. ADMINISTRATIVE SUPPORT

A. Task existing agricultural agencies within the County and other sections of the agricultural industry.

B. Augmentation and training of emergency organization will be carried out as set forth in CPG, “Guide of Increasing Local Government Civil Defense Readiness During Period of International Crisis”.

VI. GUIDANCE PUBLICATIONS

A. Food in A National Emergency, PA 1197

B. Seed in A National Emergency, PA 1271

C. Fertilizer in A National Emergency, PA 1275

D. Farm Equipment and Repair Parts in A National Emergency, PA 1284

E. Feed in A National Emergency, PA 1283

F. Natural Disaster Assistance Available from USDA, PA 1328

G. Emergency Operations Handbook for USDA State and County Emergency Personnel

VII. APPENDIX

A. BB-1 USDA Natural Disaster Reporting and Disaster Designations

B. BB-2 USDA Drought Emergency Assistance

C. BB-3 The Role of Veterinary Sciences in Chemical Emergencies

D. BB-4 Animal Disease Emergency Management

APPENDIX BB-1
USDA NATURAL DISASTER REPORTING AND
DISASTER DESIGNATIONS

USDA Flash Situation Report

Anytime a natural disaster significantly damages a rural area, the USDA County Emergency Board (CEB), will file a USDA Flash Situation Report with the State Emergency Board (SEB). The report is made by phone , as soon as possible, but within 24 hours of the occurrence, of the natural disaster. The report is relayed to the Farm Service Agency (FSA) National Office.

Disaster Designations

Secretarial Determination. Requires action as follows:

The Governor must make a written request to the Secretary of Agriculture within three (3) months of the last day of the natural disaster and request the SEB to initiate a review of the damage. The Kentucky Division of Emergency Management coordinates damage reports received from the County Judge Executive and other officials, for review by the Governor.

The CEB will prepare a Potential Natural Disaster Damage Assessment Report (DAR) when requested by the SEB.

The SEB, shall review the DAR, enter concurrence and transmit the DAR to the Farm Service Agency National Office.

The FSA, Agricultural Credit Division will review the reports and make recommendations to the Secretary of Agriculture.

FSA Administrator Designation. Based upon recommendations from the FSA Credit Manager and the State Executive Director, within three (3) months of the last day of the natural disaster, the FSA Administrator can authorize emergency loans for physical losses only. DAR's are not required.

Presidential Declaration. The Governor must make a written request to the President. The Federal Emergency Management Agency (FEMA) will survey the damaged area and make recommendations to the President. DAR's are not required.

No action will be taken to designate an area until a written request for designation of specific counties is received by the Secretary of Agriculture from the Governor. Separate letters are required for Presidential and Secretarial Designations.

Farm Service Agency Emergency Benefits

Previously disaster designations for the Agricultural Credit Emergency Loan Program triggered the Livestock Feed Program implemented by Farm Service Agency. In the future, the program will be authorized by Farm Service Agency only when requested by county FSA Committees, recommended by the State Committee, and approved by the Deputy Administrator.

APPENDIX BB-3
THE ROLE OF VETERINARY SCIENCES IN CHEMICAL EMERGENCIES

1. SITUATION AND ASSUMPTIONS

2. Many chemicals in use have the potential for causing harmful effects on humans and/or animal health.

3. Chemical accidents present features which differ from emergencies such as drought, floods, etc.

4. Hazardous Materials are covered in detail in Annex Q.

5. MISSION

The mission of the state following a chemical emergency is to protect its population and its food supplies.

6. DIRECTION AND CONTROL

A veterinary task force consisting of an animal health expert, an epidemiologist and a wildlife expert will be formed under the direction of the Dept. of Agriculture when widespread contamination of pasture or wildlife areas have occurred.

7. CONCEPT OF OPERATIONS

8. Characteristics of Chemical Emergencies

9. Disasters related to chemical accidents differ from disasters.

1. The concern is evacuating the area where the chemical pollution has occurred. Followed by monitoring and preventing further spread and contamination by the chemical(s) involved.

2. The majority of the physical setting will not be disturbed. Pastures and structures will seem as they were prior to the contamination.

3. Chemical accidents and emergencies may be slow in developing.

3) Any incident which may give hints to such a problem should be investigated.

3) Signs of these problems are recognized first in the animal populations.

3) Some events such as contamination of feed and/or water supplies can constitute a risk to animal populations not directly exposed to the original contamination.

This is true for animal products consumed away from the affected area.

10. Roles for Veterinary Services

11. Determining the kind and severity of the chemical released through biological monitoring:

1. Farm animals that were exposed to the chemical release should be examined at the beginning of the recovery phase. They should be quarantined from animals that were not exposed.

2. Each animal should be distinctly marked.

3. Every observed phenomenon for which a toxic cause cannot be excluded should be considered as a Sentinel Event. The clinical signs may provide clues relative to the degree of contamination and the causes of the problems.

4. Appropriate clinical signs may be unspecific, misdiagnosed, or missed because of the difficulty in detection; especially when animals are maintained in large groups kept on pasture.

5. Any observations should be reported and appropriate samples must be obtained and forwarded to designated labs for analysis.

12. Use of animals as monitors of the environment:

1. Complete health surveillance of the animals in the involved area is useful to evaluate:

3) the actual toxic impact of the substances on living organisms in the field;

3) the extent and duration of the contamination; and

3) the efficiency of the interventions applied. Adverse effects of the chemicals may not be apparent and may require prolonged follow-up for detection.

2. The presence of chemical contamination in healthy farm animal populations can be monitored through repeated analysis of samples of blood and/or milk, in animals taken to slaughterhouses and if possible from wildlife.

3. Adverse effects of environmental pollutants may become apparent in animal populations prior to appearance in humans.

13. Changes in the health status of animals for identification of abnormal changes to man and other animals (sentinels):

1. An animal sentinel is defined as the discovery of an unexpected abnormal and/or clinical

disturbance in an animal which may be connected in some manner to the chemical accident.

2. Potentially, identification of unexpected abnormal findings may be of substantial value in recognizing warning signs of similar developments in other animals, including humans.

3. Depending on the chemical involved, monitoring may be accomplished by periodically obtaining standardized samples from animals on farms or in slaughterhouses.

4. Veterinary surveillance of "sentinel" animals is likely to be more standardized and widespread than through other animals.

5. Changes observed in such controlled animal populations which can possibly be related to chemical exposure must be shared as early as possible with other concerned persons.

6. When animals are relocated, the risk of spreading infectious diseases must be considered.

7. Feed in a polluted area should not be used, nor should it be moved to another region.

14. Maintenance of the hygiene of elements of the food chain:

1. The number of animals contaminated easily can overwhelm the capacity of regional slaughterhouses. Many can be moved to slaughterhouses outside the contaminated area.

2. Animals within the area of contamination must remain identifiable throughout the period of containment or until they are slaughtered. They must not be traded or sold.

3. If animals are to be slaughtered, it is best that this be done as a single group so that no other animals become accidentally exposed.

4. Milk and eggs of exposed animals are not to be consumed by humans.

15. Evacuation and management of animal populations:

1. Farm animals are of particular importance because of their economic value as well as their role in the food chain.

2. Farm animals should be evacuated as soon as possible from a contaminated area, prior to the animals becoming exposed themselves. Animals that are important for breeding should have priority.

3. Animals that have been exposed should not be allowed to reproduce. Depending upon the nature and the properties of the chemicals involved, this prohibition may need to remain for several years.

4. Animals exhibiting impaired productivity and those harboring residues of the contamination should be slaughtered and examined carefully.

16. Disposal of carcasses: Carcasses in whole or parts which cannot be used because of contamination must be destroyed in a safe and economical manner. Methods for disposal include:

1. Cremation: Requires incinerators which may not be available. Care must be exercised that toxic residues may be present in the ashes or in the smoke.

2. Deep burial: This process has merit for large numbers of carcasses. Care must be exercised so as not to contaminate ground water.

3. Dissolution and inactivation by inorganic acids: The use of inorganic acids, lime, or zymothermic cells has merit only when small quantities of material must be destroyed. This process has merit for disposal of animal by-products.

17. Treatment and follow-up of involved animal population:

1. Distribution of drugs and other interventions may be attempted for valuable animals such as breeding stock, dairy cows and animals with other strong economic value.

2. Observation of sequestered contaminated animals has merit in the identification of long-term biologic effects of a chemical accident. Observations should be continued for at least two generations.

18. <u>GUIDANCE DOCUMENTS</u>

A. KyEOP, Annex Q

APPENDIX BB-4
ANIMAL DISEASE EMERGENCY MANAGEMENT

VIII. SITUATION AND ASSUMPTIONS

A. Situation

1. The agricultural industry in Kentucky is a major contributor to the economy of the Commonwealth, the Nation and the world. An outbreak of a disease that impacts the agricultural community could result in economic losses of unprecedented scale. Kentucky must be ready to effectively respond and control an outbreak of communicable disease or other conditions of livestock, poultry, wildlife and exotic animals including but not limited to environmental emergencies or natural disasters.

2. Effective eradication requires extraordinary resources and cooperation of all local, state and federal agencies, to minimize the impact on the agricultural industry and commerce.

B. Assumptions

1. People, animals or materials can bring pathogens into contact with a susceptible host and spread the disease. The pathogen must be quickly and effectively controlled. Prevention measures at all levels must be addressed.

2. An emergent disease detected anywhere in the United States puts the entire agricultural community in the country at risk.

3. There is the potential for these animal pathogens and the threat of disease to be used for terrorism.

4. Response efforts could encompass the culling of livestock and wildlife.

5. Vector Control could include the discarding of organic/inorganic matter, in any form, that is located on the site of positive detection.

6. Eradication will require proper sanitary and disposal procedures for carcasses.

7. Suspected infected facilities and transport vehicles will need to be cleaned and disinfected.

8. Areas where suspected or confirmed cases originate will require special operational procedures and quarantine areas.

9. It is possible that response procedures will extend across state lines, requiring national coordination.
10. The Federal Bureau of Investigation (FBI) will be the lead federal agency if the incident is the result of a terrorist event.

11. The United States Department of Agriculture (USDA) will be the lead federal agency for all non-terrorist agriculture events.

IX. MISSION

This appendix will insure a coordinated response to any incident, real or perceived, relating to the appearance of a communicable disease or condition within the Commonwealth's animal population that could have a direct impact on productivity, exporting of animal products or public health.

X. DIRECTION AND CONTROL

A. State Government

1. Kentucky Department of Agriculture will:

   a. Provide information on local agricultural conditions, producers and resources.

   b. Distribute scientific, procedural and diagnostic information to veterinarians practicing in the Commonwealth.

   c. Coordinate efforts of local veterinarians and any veterinary medical assistance teams.

   d. Coordinate diagnostic and laboratory support.

   e. Promulgate emergency regulations.

   f. Provide advice regarding the limits of the infected area.

   g. Quarantine infected and exposed herds.

   h. Carry out or assist in eradication efforts.

   i. Determine the appropriate method of disposition of animal/poultry carcasses.

   j. Post restrictions on intra-state commerce.

2. Kentucky Division of Emergency Management will:

   a. Activate the State Emergency Operations Center (EOC).

   b. Provide liaisons to affected jurisdictions.

   c. Prepare situation reports in coordination with the Commissioner of Agriculture for the Governor.

   d. Receive and act on requests for assistance from county emergency managers.

   e. Coordinate state response activities with local governments.

   f. Coordinate state response activities with the Federal Emergency Management Agency (FEMA) and establish the Joint Operations Center (JOC).

   g. Establish the Joint Information Center (JIC).

   h. Coordinate disaster-related public information.

3. Cabinet for Health Services will:

   a. Provide advice regarding public health aspects of eradication operations.

   b. Provide public health technical assistance to the Kentucky Department of Agriculture in selection of disposal sites within local jurisdictions.

   c. Provide advice regarding health effects of the outbreak to the public.

   d. Ensure that special medications, if required, are available to the local medical facilities.

   e. Provide Food Safety advice and support to the Kentucky Department of Agriculture in evaluating, minimizing or preventing unsafe meats from entering the human food chain.

4. Cabinet for Natural Resources and Environmental Protection will:

   a. Provide technical advice on disposal impact on ground water and air, vector control and location of cleaning and disinfecting stations.

   b. Provide technical advice to disposal teams regarding regulation on environmental impact.

c. Assist Kentucky Department of Agriculture to identify/approve regulated disposal and treatment activities.

5. Kentucky State Police will:

   a. Provide security, law enforcement, and traffic control as required.

   b. Support response operations and control access and movement.

   c. Support eradication activities in conjunction with of the Kentucky Department of Agriculture.

   d. Assist local police services, if required.

6. Kentucky National Guard will:

   a. Provide traffic control, and control access and movement.

   b. Support response operations with specialized, heavy equipment.

   c. Support eradication activities under the supervision of the Kentucky Department of Agriculture.

   d. Provide equipment to haul cargo or personnel.

   e. Provide air transportation support.

7. Transportation Cabinet will:

   a. Provide guidance for re-routing traffic in and around the affected area.

   b. Assist in traffic control issues and/or needs.

   c. Assist in the transport and disposal of soil, carcasses or debris.

   d. Assist with identification of potential sources of outside assistance, i. e., contractors, equipment sources, etc.

   e. Motor Vehicle Enforcement Officers will assist the Kentucky Department of Agriculture with implementing quarantine procedures.

8. Kentucky Community Crisis Response Board will provide counseling to victims and responders.

9. Kentucky's Universities will make available their agricultural support faculty, employees and resources to assist the Kentucky Department of Agriculture.

10. Kentucky Veterinarian Medical Association will provide membership support to the Kentucky Department of Agriculture.

11. Tourism Development Cabinet/Kentucky Department of Fish and Wildlife Resources will:

    a. Assist in providing temporary accommodation and emergency feeding for field operating teams.

    b. Provide technical assistance in the diagnosis of animal disease that affects wildlife or wildlife disease with public health implications.

    c. Conduct surveillance on susceptible wild animal species as required.

    d. Reduce infected or potentially exposed wildlife populations as required.

    e. Assist with the provision of communication resources.

    f. Establish prohibitions on harvesting game, bird and fish products in controlled areas.

    g. Conduct security patrols of forestry areas.

    h. Dispose of wildlife carcasses according to methods approved by the Kentucky Department of Agriculture.

12. Governors Office of Technology will provide technical assistance with the development and implementation of Geographic Information Systems (GIS) to assist with the management of a specific incident.

B. Local Government.

Local emergency management officials will be actively involved in the response. Each county has a comprehensive emergency management plan, which provides the framework for the jurisdiction's response to emergencies and disasters. County and local governments will utilize their resources, including County Emergency Boards, to provide an additional line of communication with local farmers, the local Cooperative Extension Office and the general population.

C. Federal Agencies

1. Federal Emergency Management Agency (FEMA). FEMA may implement

the Federal Response Plan, which provides a mechanism for organizing, coordinating and mobilizing federal resources to augment state and local resources.

2. United States Department of Agriculture (USDA) will:

   a. Assist the Kentucky Department of Agriculture with eradication activities including quarantine, evaluation, slaughter, disposal, cleaning and disinfecting, epidemiology, trace back, vector control and transportation permit systems.

   b. Collect, collate, analyze and disseminate technical and logistical information.

   c. Define training requirements for casual employees or support agencies involved in eradication operations.

   d. Issue the declaration of the disease and define the infected area and control zones.

   e. Prepare information for dissemination to the public, media, producers, processors and transportation industry.

   f. Allocate funding for compensation to the owner of destroyed animals.

   g. Post restrictions on interstate commerce.

   h. Coordinate the response of other federal agencies including but not limited to the USDA Wildlife Services, U.S. Fish and Wildlife, U.S. Forestry and U. S. National Park Service.

   i. Provide resource information to the Kentucky Department of Agriculture for the selection of disposal sites.

   j. See USDA Animal and Plant Health Inspection Service (APHIS), National Emergency Response to a Highly Contagious Animal Disease, updated March 30, 2001, for more information.

3. Federal Bureau of Investigation (FBI). In the event the incident is declared a terrorist act, the FBI will become the lead federal incident manager. See Annex AA, Terrorism, for more information.

XI. CONCEPT OF OPERATIONS

A. State

1. The Kentucky Department of Agriculture will be the lead state agency.

2. KyEM will coordinate other state and local government agencies in support of the Kentucky Department of Agriculture.

B. Emergency Management response strategies will be based on the location of the animal population where the communicable disease is detected. The disease will be assigned to one of the following categories.

1. Foreign Animal Disease – An important transmissible disease in livestock or poultry believed not to exist in the United States and its territories. The disease has the potential to significantly impact Kentucky's economic and animal health. The disease is listed in the Office of International Epizootics (O.I.E.) Disease Code List.

2. Reportable Disease – A diagnosed disease in domestic animals or poultry that is reportable under state law to the Kentucky Department of Agriculture.

3. Emerging Disease – A new disease or a new emergence of an old disease that manifests itself within the Commonwealth.

C. Control and Eradication

1. Control and eradication procedures will follow the generally accepted protocols of isolation, quarantine, vaccination and therapeutic treatment. Strict bio-security, sanitation, vector control and proper disposal are essential. Case incident closures will be conducted by the State Veterinarian and when requested, the USDA.

2. Professional wildlife and rodent control personnel will be called on to investigate affected premises for elimination of species that could be fomite or biological vectors.

3. Kentucky Department of Agriculture and when requested, the USDA will jointly develop a plan for the control or eradication of a disease specific to each situation. Control and eradication plans may be based on current state and federal control plans and programs, where applicable.

4. Kentucky Department of Agriculture and when requested, the USDA will jointly determine the need for euthanasia of animals as a part of diagnostics and tissue collection, or as part of a disease control/eradication program. Method of euthanasia will be determined according to the category of disease in accordance with the American Veterinary Medical Association (AVMA) guidelines.

5. The disposal of animal remains and any investigation related materials (such as coveralls, gloves, etc.) will follow strict bio-security guidelines to prevent the spread of disease. All workers involved in the animal disposal process will wear rubber boots, disposable coveralls and eye and air passage protection. Carcasses will be categorized as edible or non-edible as designated by the Kentucky Department of Agriculture or USDA.

    a. Edible: Animal carcasses for human or animal consumption may be salvaged. Determinations and handling will be based on state and federal meat inspection guidelines.

    b. Non-edible: Disposal will follow guidelines established by USDA-APHIS and Kentucky statutes. Composting will not be used, unless authorized by the Kentucky Commissioner of Agriculture.

6. Indemnity for condemned animals will be paid and approved according to state or federal guidelines.

7. Quarantine

    a. The Commissioner of Agriculture, or his designee, may impose limits on the movement of animals and products derived from animals within, into or out of the Commonwealth.

    b. When an animal health situation warrants, the premise and all off-site locations where the animals were housed will be quarantined immediately by a state/federal employed veterinarian approved by the state veterinarian.

D. USDA Foreign Animal Disease Diagnostician (FADD) can perform clinical evaluation and diagnostic procedures on suspect animals. Collection and submission of specimens will be the responsibility of the state or federal regulatory personnel with assistance from the local veterinary practitioners. At the diagnostic laboratory a priority number and laboratory assignment will be obtained prior to the submission of specimens to federal diagnostic laboratories. State diagnostic laboratories will be used when feasible.

E. Bio-security/Decontamination

1. Strict bio-security will be followed at all times. All vehicles leaving the quarantined premises will be thoroughly cleaned and disinfected with a state/federally approved disinfectant. Contracting for equipment such as high-pressure sprayers may be necessary.

2. Only essential personnel will be allowed access to the quarantined site. Everyone must remove outer garments and disinfect boots prior to leaving the quarantined area or crossing the clean line.

F. Epidemiology

The state or federal veterinarians will determine a crisis time block for the animals on the affected premise. They will do a complete evaluation of the animal's movements (current and past locations) and present health status. The presence and proximity of other animals in the area will be considered. If any animal or avian species at another location is found sick, specific protocols for the primary infection site will be followed.

G. Initial Response Actions. The following actions will be taken.

1. A control area is defined.

2. Movement into, from and within the control area will be restricted.

3. Infected livestock are evaluated and contained.

4. Infected facilities and animal transports are cleaned and disinfected.

5. Information is developed on health-related matters, movement controls and eradication plans/methods.

6. The origin of the disease is traced and the potential spread is monitored and controlled.

H. Joint Information Center/Public Information

The Joint Information Center (JIC) will serve as the only source of all official information (federal, state, local), regarding all incident activities. The JIC in coordination with KyEM will provide a forum for the coordinated release of all information related to the incident, threat, response actions including press conferences and other scheduled briefings. A representative of the Kentucky Department of Agriculture will serve as the lead spokesperson.

XII. ADMINISTRATIVE SUPPORT

A. Administrative support will be provided by local jurisdictions to document disaster accounts for federal and state reimbursement.

B. In the event of a Presidential/USDA Disaster Declaration, KyEM will provide administrative support by processing documents authorizing payments to

individuals, families, local governments and state agencies.

C. The Federal Emergency Management Agency (FEMA) also provides administrative support in the Disaster Field Office by preparing Project Worksheets and other documents allocating funds for disaster related emergency work and debris removal.

XIII. GUIDANCE DOCUMENTS

A. USDA Regional Emergency Animal Disease Eradication Organization (READEO) – Manual

B. USDA READEO – Foot and Mouth Disease, 18 OCT 1998

C. USDA Foot and Mouth Disease Emergency Disease Guidelines, OCT 1991

D. USDA National Emergency Response to a Highly Contaminated Animal Disease, 30 MAR 2001

E. KRS and KAR references

XIV. TABS

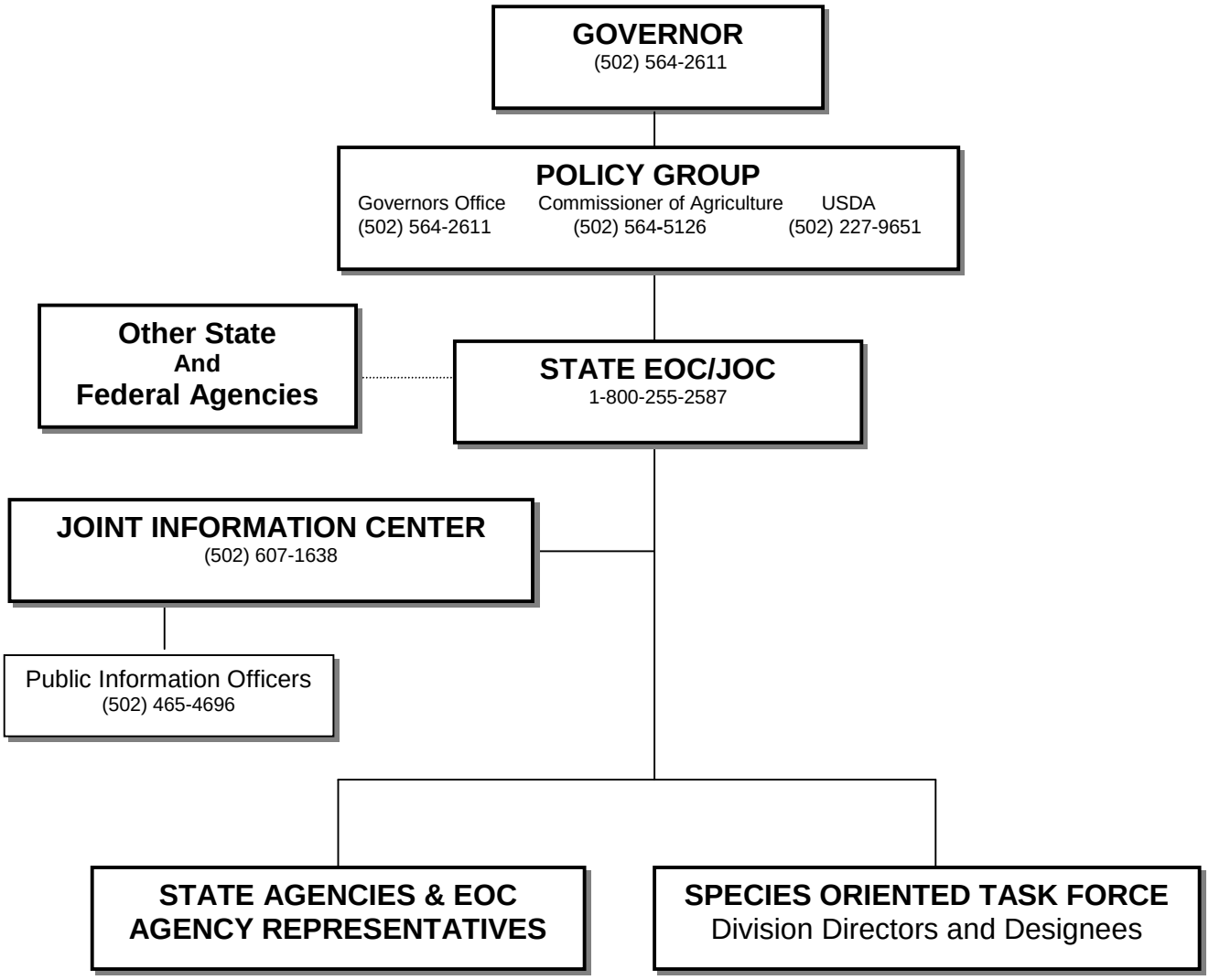
A. BB-4-1 (Organizational Chart)

B. BB-4-2 (Notification Chart)

C. BB-4-3 (Sequence of Events)

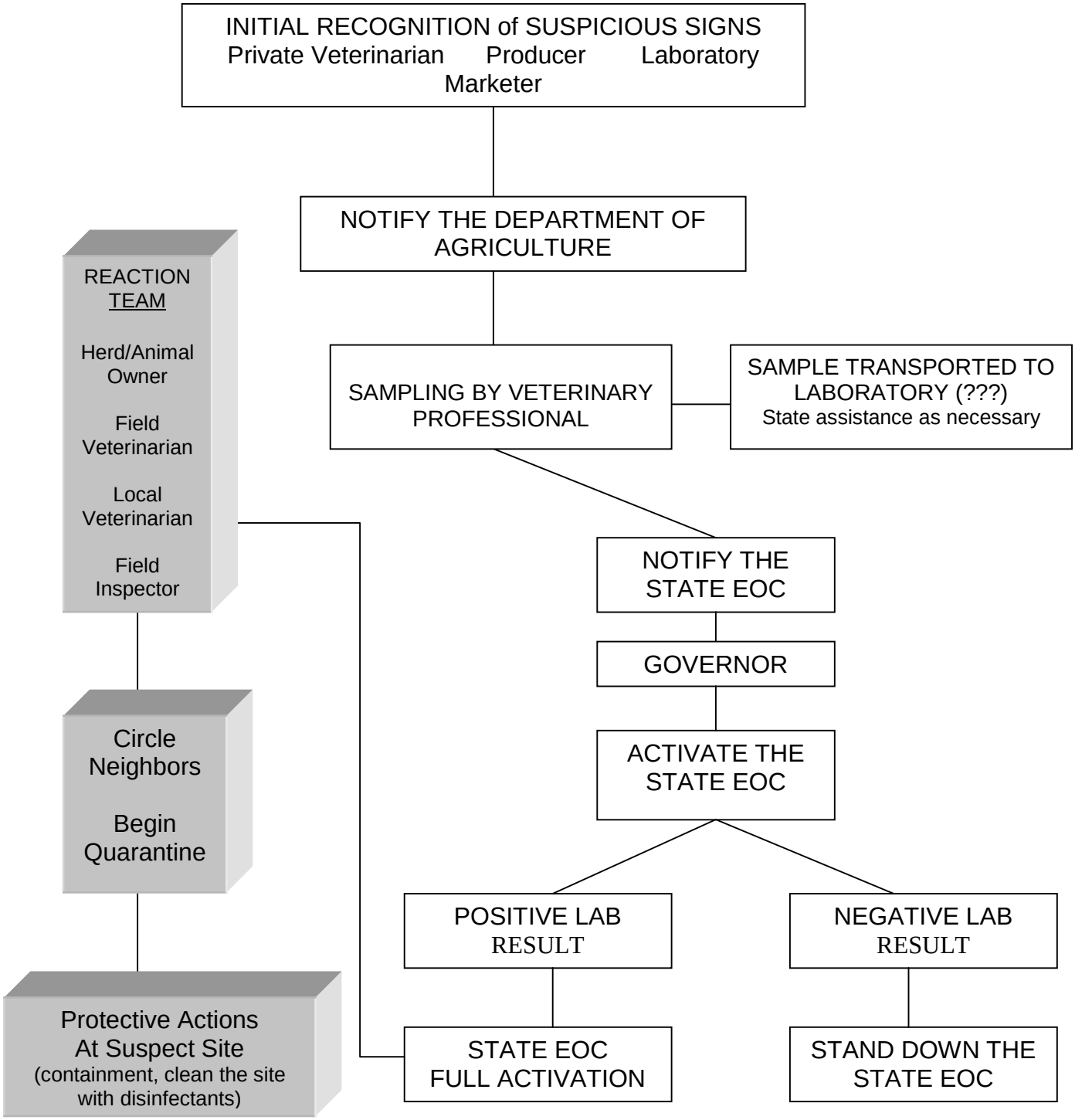
TAB BB-4-1
ANIMAL DISEASE EMERGENCY MANAGEMENT

ORGANIZATIONAL CHART



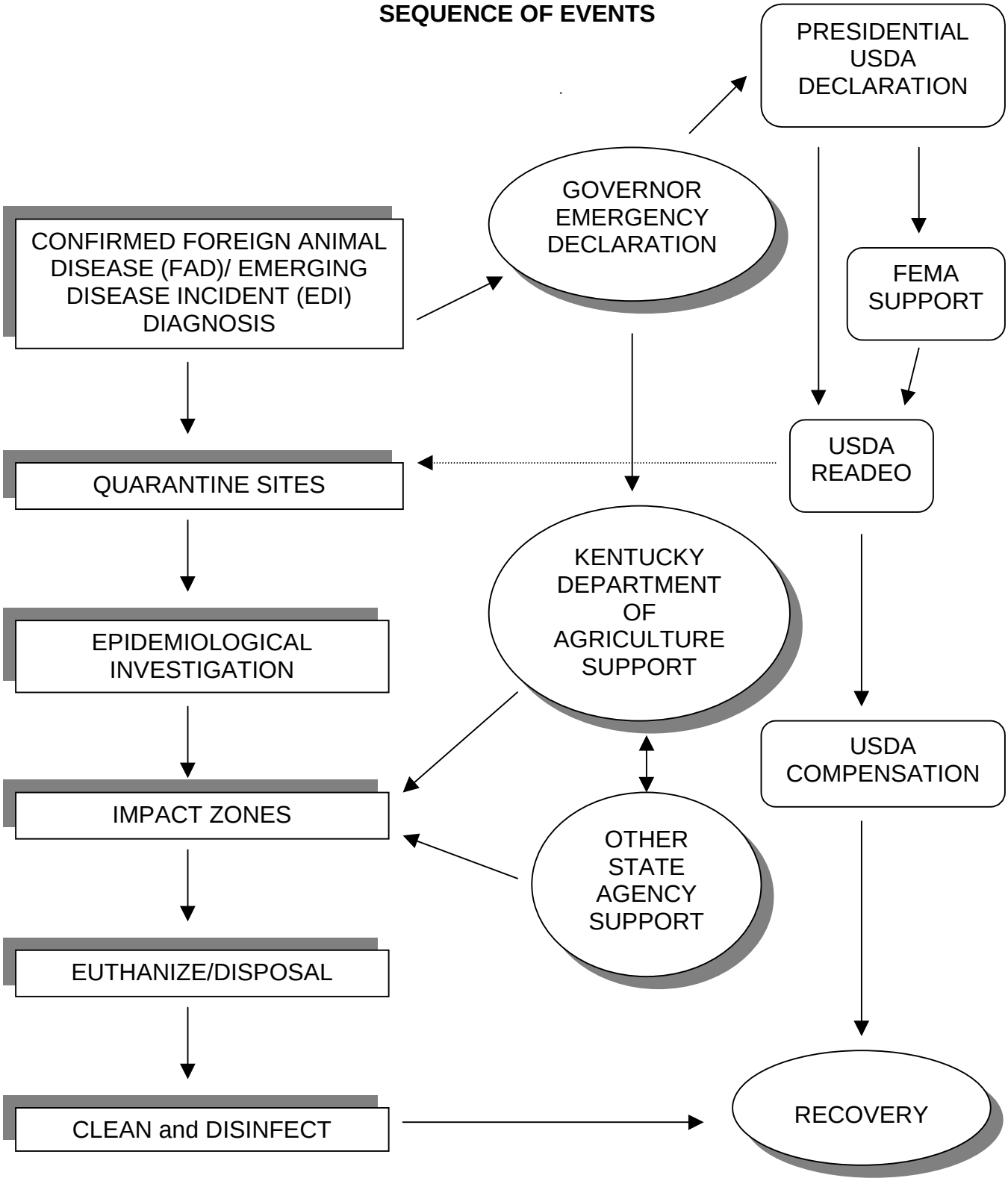
TAB BB-4-2
ANIMAL DISEASE EMERGENCY MANAGEMENT

NOTIFICATION CHART



TAB BB-4-3
ANIMAL DISEASE EMERGENCY MANAGEMENT

SEQUENCE OF EVENTS



APPENDIX BB-5
MEDICAL SERVICE TO ANIMALS

1. SITUATION AND ASSUMPTION

Large scale disasters will injure, kill and displace animals. These animals may be pets, livestock and wildlife.

Located within Kentucky are Veterinary Associations, Humane Societies, wild life experts, industry representatives and animal care providers who can assist in the care of injured animals and the disposal of dead animals.

Care of wildlife and domestic animals shall be a joint governmental and non-governmental effort.

2. DIRECTION AND CONTROL

The Kentucky Department of Agriculture will coordinate the care and/or disposal of domestic animals.

The Kentucky Cabinet for Tourism, through its Department of Fish and Wildlife Resources, will coordinate the disposition of wildlife.

3. CONCEPT OF OPERATIONS

The Kentucky Department of Agriculture will coordinate animal care, euthanasia of injured animals, and disposal of dead animals.

The Kentucky Department of Fish and Wildlife Resources will coordinate the disposition of displaced and/or injured wildlife. The Department maintains a list of wildlife rehabilitators.

The Kentucky Department of Agriculture, in cooperation with the Kentucky Veterinary Medical Association, local government or the humane societies, will coordinate sheltering of pets.

The Kentucky Veterinary Medical Association will assist in providing emergency care for animals if so requested by government agencies.

The Kentucky Cabinet for Health Services will coordinate vector control for animal borne diseases. The Department for Public Health, in cooperation with the Department of Agriculture, will conduct field investigations, collect samples, oversee laboratory tests, assist in providing necessary animal control equipment and supplies, and provide technical assistance to local government.

The Kentucky Department for Public Health, Division of Public Health Protection and Safety will verify and destroy all contaminated meats, fish and poultry.

The Department of Agriculture will coordinate the evacuation of any live stock as a result of a disaster.

In the event of a major search and rescue operation using animals, the Kentucky Veterinary Medical Association will, if asked, provide medical assistance.

The Kentucky Department of Agriculture, in cooperation with Kentucky Veterinary Medical Association, will supply public information during a major disaster.

The Louisville Zoo has two CDC approved holding cages for holding animals for medical surveillance.

4. ADMINISTRATIVE SUPPORT

Administrative Support may be provided by Kentucky Department of Agriculture, Kentucky Department of Fish and Wildlife Resources and other state and private agencies.

5. REFERENCES

Veterinary Services In Disaster And Emergencies, ED. Robert J. Schroeder DVM , 1987.

6. TABS

BB-5-1 Standard Operating Procedures for Responding to Needs of Animals in a Disaster

BB-5-2 Disposal of Dead Animals

TAB BB-5-1
STANDARD OPERATING PROCEDURES FOR
RESPONDING TO NEEDS OF ANIMALS IN A DISASTER

I. SITUATION AND ASSUMPTIONS

Animals can be affected by a disaster just like humans. The following forms provide minimum guidance in responding to some of the needs of animals and their owners in a major disaster.

I. VETERINARY PERSONNEL

INTRODUCTION:

The following are veterinarians and technicians who have volunteered to provide expertise and/or equipment during a disaster.

Name _____ Home Address_____

Home Phone _____ _____

Work Phone_____ _____

Emergency Phone_____ Work Address_____

Pager_____ _____

Cellular Phone_____ FAX_____

Name _____ Home Address_____

Home Phone _____ _____

Work Phone_____ _____

Emergency Phone_____ Work Address_____

Pager_____ _____

Cellular Phone_____ FAX_____

NOTE: Please copy as many extra blank pages as needed prior to filling out facility names.

II. TRANSPORTATION

INTRODUCTION

During a disaster, transportation of large and small animals from the site of the disaster to the appropriate holding facility is a crucial link to a well-organized rescue effort. For large scale disasters, the Department of Transportation can be asked to provide large trucks. Below is a list for local transportation of animals.

A. SMALL ANIMAL TRANSPORTATION CHECKLIST

_____ 1. Mobile Veterinary clinics

a.
b.
c.

_____ 2. Dog Kennels (hunting clubs, etc.)

a.
b.
c.

_____ 3. Animal Control Vehicles

a.
b.
c.

_____ 4. Private Vans, Trucks, and Trailers
(Description: covered vehicles equipped with dividers, crates, or airline pet carriers to keep each animal separate during transport).

a.
b.
c.

_____ 5. Humane Organizations

a.
b.
c.

B. LARGE ANIMAL TRANSPORTATION CHECKLIST

_____ 1. Horseman's Association/Riding Clubs

a.

b.

c.

_____ 2. Private Horse Trailers

a.

b.

c.

_____ 3. Horse Transport Companies

a.

b.

c.

_____ 4. Livestock Transport

a.

b.

c.

TRANSPORTATION - Ideally, transportation will include a vehicle that will stop at Red Cross centers to pick up pets for boarding or treatment. Appropriate authorization forms/medical records must be signed and adequate identification is needed (i.e., collar/microchip for each animal). The owner will be given a number to call to check on their animal. Coordinate closely with animal shelters, veterinary hospitals and kennels.

C. SMALL ANIMAL TRANSPORTATION RESOURCES

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone_____Cellular Phone _____

Description of transportation resource: _____

_____

_____

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone_____Cellular Phone _____

Description of transportation resource: _____

_____

_____

NOTE: *Please copy as many extra blank pages as needed prior to filling out facility names.*

D. LARGE ANIMAL TRANSPORTATION RESOURCES

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone_____Cellular Phone _____

Description of transportation resource: _____

_____

_____

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone_____Cellular Phone _____

Description of transportation resource: _____

_____

_____

NOTE: *Please copy as many extra blank pages as needed prior to filling out facility names.*

III. ANIMAL CARE AND HOLDING FACILITIES

INTRODUCTION

Animal holding facilities are the most valuable resource in a disaster. A triage system must be implemented if space is available to transport animals needing veterinary care to veterinary hospitals, and healthy but lost animals to shelters, kennels, etc. Animal identification during transport and holding is essential. Standardized medical records must be kept on all animals treated during a disaster. Depending on the number of animal injuries, veterinary hospitals may also be used as boarding facilities until the owners can be located and have a place for their pet.

Animal identification during treatment and holding is essential. An adhesive tape collar or plastic strip with a description of where the animal was found or owner's name (if known) will greatly aid in returning the animal to its owner following a disaster.

ANIMAL SHELTERING

The following facilities may be used to shelter animals:

1. <u>SMALL ANIMAL / EXOTIC / WILDLIFE VETERINARIANS</u>

Kennels/Boarding Facilities

SPCA/Humane Organizations

Animal Control

Wildlife Rehabilitation Centers

2. <u>LARGE ANIMAL / EQUINE</u>

Mixed, Large Animal and Equine Veterinarians

Stables, Racetracks, Private Farms

Fairgrounds

Stockyard Companies

1. Small Animal Holding Facilities (Local Private Kennel/Boarding Facilities, etc.)

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

NOTE: *Please copy as many extra blank pages as needed prior to filling out facility names.*

2. Large Animal Holding Facilities (Local Private Stables, Racetracks, and Showgrounds, E

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

Facility Name _____

Facility Address _____

_____

Owner's Name _____

Phone

_____

Chip/Scanner available ___ YES ___ NO

NOTE: *Please copy as many extra blank pages as needed prior to filling out facility names.*

LOST ANIMAL

PET INFORMATION

Today's Date:

_____

Date Lost:

_____

Sex: M / F Neutered: Yes / No

Type and Breed

_____

Coat: Short / Medium / Long

Eye Color:

_____

Weight:

_____

Color(s)

_____

Markings:

_____

_____

_____

_____

Scars/Physical Peculiarities:

_____

_____

_____

_____

Detailed Description

_____

_____

_____

_____

_____

Age:_____Years / Months / Weeks

If age is unknown: Young / Adult / Old

Pet's Name

_____

Collar: Yes / No Tag: Yes / No

Description of each:

_____

_____

_____

_____

Recorder's Name

_____

_____

_____

OWNER INFORMATION

Name (Last)

_____

(First)

_____

Phone (Day)

_____

(Evening)

_____

Other persons that can be contacted (permanent numbers **ONLY**)

Name

_____

Phone (Day)

_____

(Evening)

_____

Address

_____

_____

_____

_____

Location of Loss: (use number & street)

Address:

_____

Cross Street:

_____

Neighborhood:

_____

City:_____Zip:

_____

Photo Available? Yes / No

Photo included with report Yes / No

Other missing animals on file? Yes / No

Health Problems / Vital Medications:

_____

_____

_____

Notes:

_____

_____

_____

_____

_____

_____

FOUND ANIMAL

PET INFORMATION

Today's Date:

_____

Date Found:

_____

Sex: M / F

Neutered: Yes / No / Can't tell

Type and Breed

_____

_____

_____

Coat: Short / Medium / Long

Eye Color:

_____

Weight:

_____

Color(s)

_____

Markings:

_____

_____

_____

Scars/Physical Peculiarities:

_____

_____

_____

_____

_____

Detailed Description

_____

_____

_____

_____

_____

_____

Age:_____Years / Months / Weeks

If age is unknown: Young / Adult / Old

Pet's name or ID#

_____

Collar: Yes / No Tag: Yes / No

Description of each:

_____

_____

_____

Recorder's Name

_____

FINDER INFORMATION

Name (Last)

_____

(First)

_____

Phone (Day)

_____

(Evening)

_____

May owners of missing pets contact you directly? Yes / No

Location of Find: (Use number & street)

Address:

_____

Cross Street:

_____

Neighborhood:

_____

City:_____Zip

_____

FOUND Ads in Newspapers: Yes / No

Other place you have reported this to:

_____

_____

Posters placed in neighborhood: Yes / No

Are you planning to foster until either the owner or a permanent home is found? Yes / No

If not where will you take the animal?

_____

_____

May owners of missing pets contact you: Yes / No

Will you adopt if no owner is found: Yes / No

Health Problems / Vital medications:

_____

_____

_____

_____

_____

_____

Notes:

_____

_____

_____

VETERINARY RESPONSE HISTORIAN CHECKLIST

INTRODUCTION

The following should be filled out by the animal response coordinator and turned in to the

KyEM Area Manager at the end of the disaster.

General Information

1. Type of Disaster (e.g., earthquake, fire, oil spill, etc.)

2. Date and Duration of Disaster

3. Geographical Boundaries (e.g., address, county, area)

Animal Information

4. Species of Animals Involved in Disaster

5. Number of Animals Involved in Disaster (by species)

6. Extent of Injuries to Animals (descriptions)

7. Number of Animals Dead (by species)

8. Number of Unclaimed Animals (by species)

9. Number of Claimed Animals (by species) _____

_____

_____

Veterinary Care

10. Number of Veterinarians Providing Support _____

_____

11. Number of Veterinary Technicians/AHTs Providing Support _____

_____

12. Number of Veterinary Hospitals Used _____

_____

13. Approximate Total Veterinary Hours _____

_____

14. Approximate Total Technician/AHT Hours _____

_____

15. Approximate Veterinary Supply Cost _____

_____

_____

PHOTOGRAPHY LOG / VIDEO CASSETTE LOG

Date	***Description of Photo / Video Cassette***	***Roll / Cassette Number***

NOTE: *Please copy as many extra blank pages as needed*

S Subjective data listing
O Objective data listing
A Assessment, differential and prognosis
P Plans (assign staff member(s) to appropriate duties)

MEDICAL HISTORY

Date	*Subjective, Objective, Assessment, Plan*	*Cost*	*Initial*

NOTE: *Please copy as many extra blank pages as needed*

CVMA DISASTER RESPONSE RESOURCE GUIDE

Animal Treatment and Sheltering Log

Each animal care and holding facility should complete this log
and send a copy to your Veterinary Response Historian (VRH).

DATE ADMITTED	DESCRIPTION OF ANIMAL	CONDITION & TREATMENT	DISPOSITION	DATE RELEASED

NOTE: *Please copy as many extra blank pages as needed*

TAB BB-5-2
DISPOSAL OF DEAD ANIMALS

A large scale disaster probably will be accompanied by the death of numerous animals. These animals may range in size from very small (mouse) to very large (horse), and could be wildlife, pets, farm animals, or a combination of these three. Under usual conditions, KRS 257.160 requires the disposition of animal carcasses within 48 hours of their discovery by burning (complete cremation), boiling (rendering), or burying (specified burial conditions). None of these methods may be practical or achievable under disaster conditions. The death of one small animal such as a rodent might be remedied as easily as tossing it in the "dumpster". However, disposal of a herd of 100 dairy cattle or a flock of 50,000 chickens will present new challenges for disaster emergency services.

There will be an element of urgency in disposal of carcasses. Not only are rotting carcasses a distasteful sight and smell, but they may present very real public health problems through contamination of water, contamination of food crops or stores, and as a source of infection for healthy animals and humans. Timely, appropriate disposal of carcasses will eliminate or lessen the possibility of these problems.

In an emergency, individual, small animals (less than 150 lbs.) can be disposed of by placing in heavy plastic bags and burying at a landfill. Individual, large animals (more than 150 lbs.) can be buried in a pit at least 4 feet deep, covered with 2 inches of quicklime and 3 feet of earth. The site should be in an area that is never covered by water and at least 100 feet distant from any well, spring, or watercourse. Large numbers of dead animals will require specialized disposal techniques. Rendering of dead animals for other uses is highly desirable, but the number of rendering services in Kentucky is very limited and most likely they will be inoperative or overwhelmed in a disaster situation. Another disposal technique is mass burial. Before selecting a site, consideration should be given to underground cables, water and gas lines, septic tanks, wells, water tables, and rock formations. The United States Department of Agriculture recommends that to bury a large number of animals, a trench 7 feet wide by 9 feet deep is required. The length is determined by the number of carcasses to be buried; it is calculated at 2 feet for each bovine-size carcass (5 mature hogs or sheep equal 1 bovine carcass). If conditions permit, a deeper trench (12-20 feet) can be used; for every additional 3 feet in depth, the number of animal buried can be doubled. Caution: the bottom of the trench should remain at least 6-10 feet above the water table.

Another alternative is mass cremation of carcasses and can be done in the open air. Select a flat area, readily accessible to heavy vehicles and away from public view. The site must be away from buildings, public roads, electric and telephone lines, shallow underground pipes, and gas lines. The fire will burn better if constructed at right angles to the prevailing winds. Take into account areas over which the smoke will drift. Carcasses should be elevated on a platform of incendiary material such as wood, coal, straw, or old tires. The amount of incendiary material will depend on the number and species of animals burned. The fire will need to be monitored at all times.

Newer techniques for animal disposal include composting and fermentation. While these techniques require more care in preparation, there is the advantage that they are

more environmentally friendly, produce very little odor, and the products of degradation are usable as fertilizer from composting or animal feed from fermentation. Another new technique is tissue digestion which utilizes sodium hydroxide to hydrolyze up to 2,000 pounds of solid animal matter to liquid waste within 18 hours. This liquid waste is safe for sanitary sewer disposal. Details of these procedures are too lengthy to describe here and can be obtained as needed.

There are several general considerations for carcass disposal. Most of the techniques described above will require exemption from environmental laws and regulations. It is expected that in true disaster situations practical solutions will prevail. Adequate heavy transportation and earth moving equipment will be necessary to move large numbers of carcasses and prepare disposal sites; these might be provided through governmental agencies or private contractors. Any carcasses moved over highways should be in trucks with solid sides and waterproof tarps over the load to prevent contamination of other areas during transportation. If animal diseases, rather than the disaster itself, are suspected of killing large numbers of animals, provisions will need to be made for diagnostic sampling of dead or dying animals. While it is tempting to try to salvage fresh dead farm animals for food, it is against the law to sell or donate meat that has not been inspected. Also, by law, one cannot give to the indigent any food products of a lesser quality than that sold to the public.